

Calibrated Noise Source Module With a Noise Output ENR of 30 dB, and a Voltage of +28 VDC, Operating From 0.01 MHz to 2 GHz With SMA

FMNG1020 is a coaxial packaged Noise Source module which operates over a wide frequency range from 10 KHz to 2 GHz. The design is calibrated for 10, 100, 1000, and 2000 MHz frequencies and is ideal for Noise Figure measurements and a variety of built-in test applications. This model operates at +28 Vdc and features a high Output ENR level of 30 dB min, typical flatness across the entire frequency band is +/- 0.5 dB, and excellent stability. Performance is specified over -20°C to +75°C with Noise Output Temperature Variation <0.01 dB/°C, Noise Output Variation <0.1 dB/%V. The rugged package design supports an input Female BNC connector for DC biasing, and an Output Female SMA connector. Additionally, the model is designed to meet a variety of demanding MIL-STD-202F environmental test conditions including Humidity, Thermal Shock, and Vibration for added confidence for highly reliable operation.



Features:

- 10 kHz to 2 GHz Frequency Range
- Output ENR 30 dB min
- Flatness 1.5 dB typ
- 28 VDC Operation
- Small Size 1.25" by 0.75" by 0.50"
- Internal Voltage Regulation

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	10KHz		2	GHz
Impedance		50		Ohms
Output ENR	30			dB
Flatness		±1.5		dB
VSWR			3:1	
Output Variation vs Input Voltage			0.1	dB/%V
Output Variation vs Temperature			0.01	dB/deg C
Bias Voltage 1	22	28	30	Volts
Input Current 1			20	mA
Calibration Points	10, 100, 1000, and 2000 MHz			

Applications:

- Measure Noise Figure
- Signal Strength Calibrators
- Radar
- Jamming
- SATCOM for BER and NF
- Source of Jitter

Mechanical Specifications

Size	
Length	1.25 in [31.75 mm]
Width/Dia.	0.75 in [19.05 mm]
Height	0.5 in [12.7 mm]
Weight	0.103 lbs [46.72 g]
Package Type	Connectorized Module
Connectors	
DC Connector	BNC Female
Output Connector	SMA Male

Environmental Specifications

Temperature	
Operating Range	-20 to +75 deg C
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



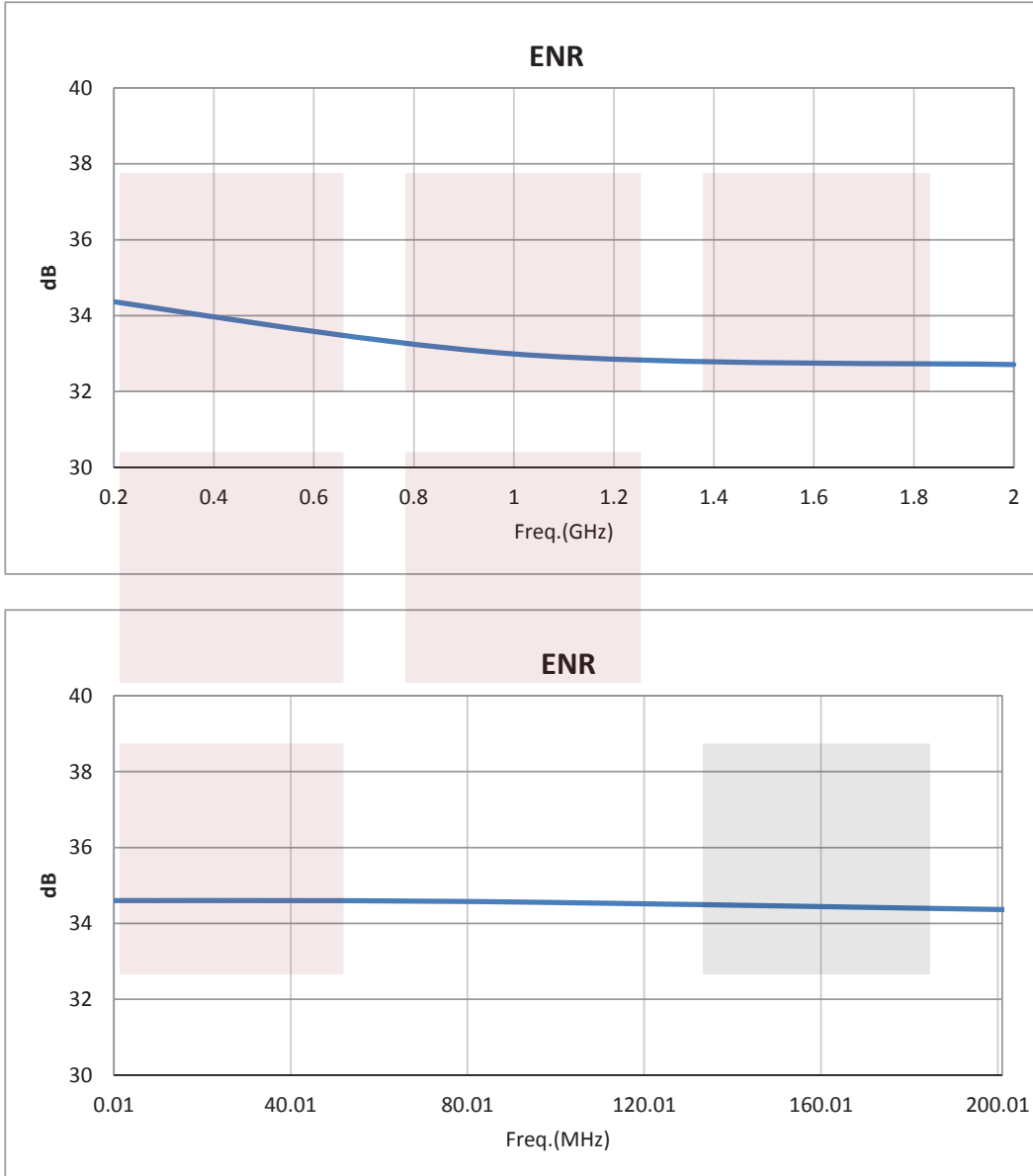
Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

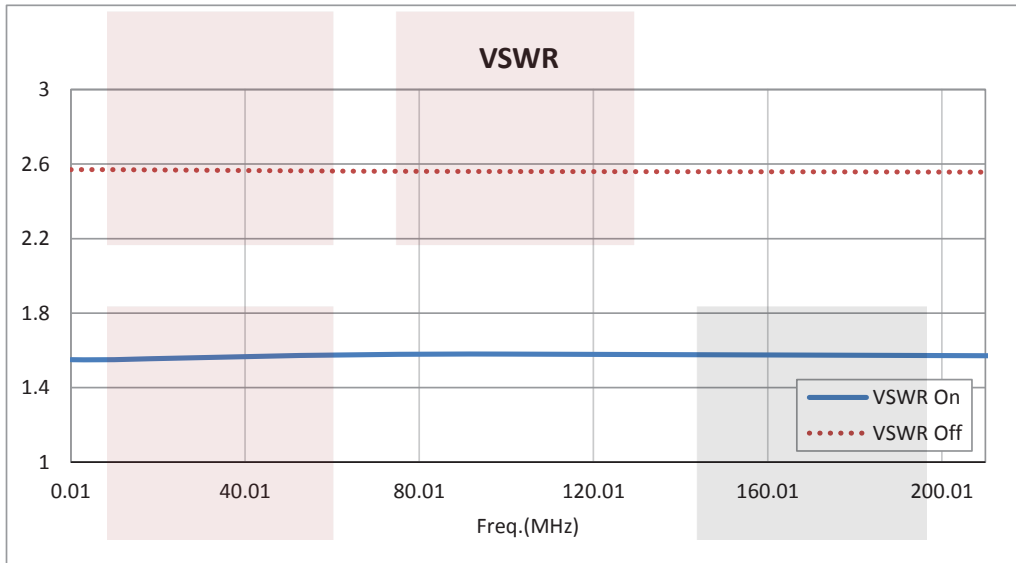
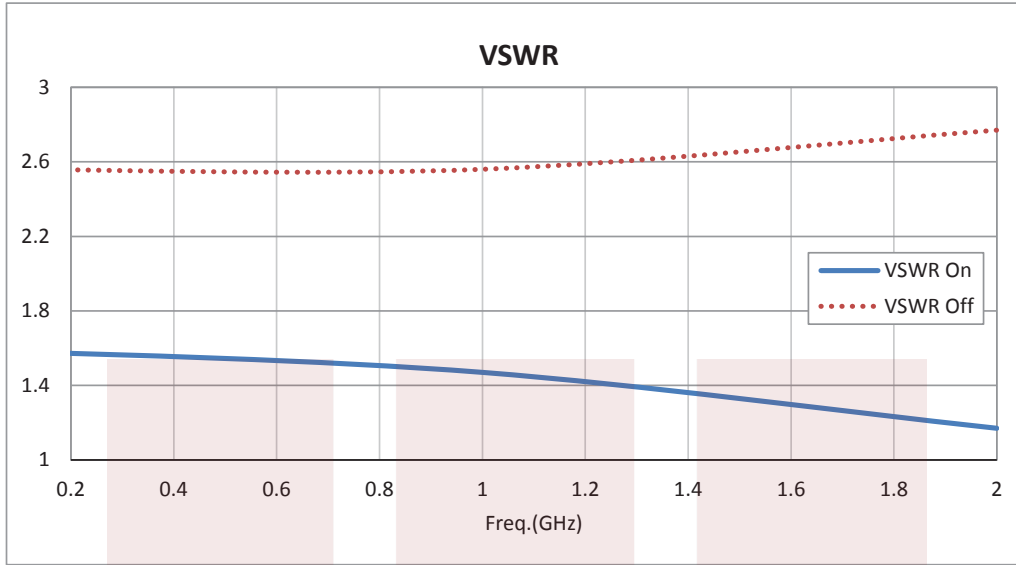
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data





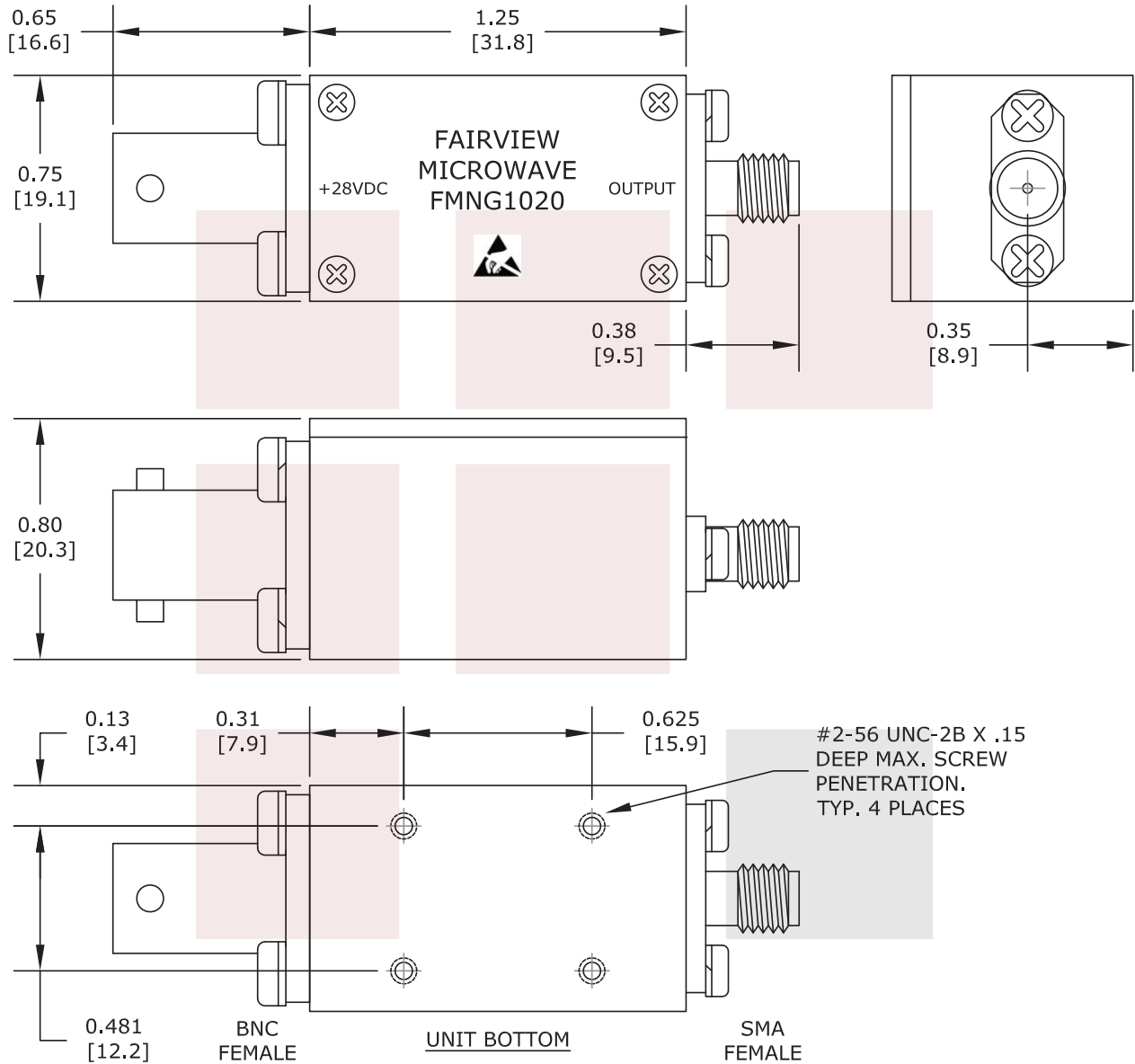
Calibrated Noise Source Module With a Noise Output ENR of 30 dB, and a Voltage of +28 VDC, Operating From 0.01 MHz to 2 GHz With SMA from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Calibrated Noise Source Module With a Noise Output ENR of 30 dB, and a Voltage of +28 VDC, Operating From 0.01 MHz to 2 GHz With SMA FMNG1020](#)

URL: <https://www.fairviewmicrowave.com/calibrated-noise-source-enr-30-db-2-ghz-sma-fmng1020-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE Calibrated Noise Source Module With a Noise Output ENR of 30 dB, and a Voltage of +28 VDC, Operating From 0.01 MHz to 2 GHz With SMA		DWG NO FMNG1020		CAGE CODE 3FKR5	
CAD FILE 110515 SHEET		SCALE N/A		SIZE A 2233	